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September 15, 2004

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62609

Identifier:

128346.31801

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Examiner Wayne A. Langel

United States Patent and Trademark

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Examiner Langel,

Thank you again for your time this morning. As mentioned by Jim Singer and myself, we have prepared a chart that hopefully will aid in your review of the 9/9/04 claim amendments. We look forward to hearing from you in regards to this case.

Sincerely,

Carissa A. Tener

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Application No. 10/001,573 Low Oxygen CBN Zimmerman, et al.

Filed 11/2/01

Examiner Langel

| <u>Examiner La</u> | anger | | | | |
|--|--|--|--------------------------|---|---|
| 28346.31801 | | | | | |
| Source | catalyst | oxygen getter | % of oxvgen getter | Oxygen content | Crystal toughness |
| Claim 1 | catalyst | oxygen getter comprising Ti, Al and Si | 0.005 to 0.5 wt% | less than 300 ppm | Improved toughness: both TI and TTI higher than w/o getter, little difference b/t TI and TTI. For low oxygen content CBN, TTI is actually higher than TI. |
| Claim 23 | catalyst | oxygen getter comprising Ti | 0.005 to 0.5 wt% | less than 300 ppm | Improved toughness: both TI and TTI higher than w/c getter, little difference b/t TI and TTI. For low oxygen content CBN, TTI is actually higher than TI. |
| French | catalyst containing at least one alkali or alkaline-earth metal nitride AND additive element - Al, B, Si, Zr and Ti | none | none | not described | not described |
| British (Production of PCBN) | refractory comp - transition metal nitride | none | none | not described | not described |
| Japanese | Si, Al, Li, Mg, Ca, and nitrides thereof | none | none | not described | not described |
| Sato Article | Mg ₃ N ₂ | Zr powder – linked to yield | none | not described | not described |
| US Patent 3,768,972 Taylor | Al and alloys of Al and Ni | none | none | not described | not described |
| US Patent 6,508,996 Shioi et al. | amides, imides and carbides of alkali metals and alkaline earth metals AND Si or B source | none | none | NO data – low oxygen hBN as starting material linked to yield | invention "improves" toughness, as shown by a smaller difference between |